Process Biochemistry **26** (1991) 389–392

Contents of Volume 26

Number 1

Anaerobic Digestion of Canteen Wastes for Biogas Production: Process Optimisation 1
KRISHNA NAND, S. SUMITHRA DEVI, PREMA VISWANATH, SOMAYAJI DEEPAK & R. SARADA (India)

Effect of Recycling of Fermentation Broth for the Production of Penicillin Amidase 7
P. S. R. BABU & T. PANDA (India)

Utilization of Sugar Cane Bagasse Hemicellulosic Hydrolysate by *Pichia stipitis* for the Production of Ethanol 15
I. C. ROBERTO, L. S. LACIS, M. F. S. BARBOSA & I. M. de MANCILHA (Brazil)

Production of *Schizosaccharomyces* sp. HL Biomass from Supernatant of Anaerobically Fermented Pig Waste 23
S. S. HONG, N. H. LEE & M. Y. PACK (South Korea)

Essential Metal Ions in the Control of Microbial Metabolism . . 31
E. G. DEDYUKHINA & V. K. EROSHIN (USSR)

Continuous Production of Soy Sauce by a Bioreactor System . . 39
TAKASHI HAMADA, MISAO SUGISHITA, YAICHI FUKUSHIMA, TETSURO FUKASE & HIROSHI MOTAI (Japan)

Comparative Study of Bacterial Leaching of Metals from Sewage Sludge in Continuous Stirred Tank and Air-lift Reactors . . . 47
R. D. TYAGI, D. COUILLARD & F. T. TRAN (Canada)

News, Reviews and Events 55
Product and Service Finder 63

Number 2

Fungal Cellulolytic Enzyme Production: A Review 65
INGRID PERSSON, FOLKE TJERNELD & BÄRBEL HAHN-HÄGERDAL (Sweden)

Diffusion Characteristics and Properties of Chitosan Coacervate Capsules 75
YOGA PANDYA & DIETRICH KNORR (USA)

The Effect of Electric Fields upon Yeast Growth Kinetics and Metabolism 83
L. R. WEATHERLEY, R. MARTIN & J. C. SLAUGHTER (UK)

Studies on the Effect of Potassium Bromate on some Malting Properties of Nigerian Millet (*Pennisetum maiwa*) 89
R. C. AGU & B. C. OKEKE (Nigeria)

Process Biochemistry (**26**) (1991)—© Elsevier Science Publishers Ltd, England.

Cellulase Production Induced by Carbon Sources Derived from Waste Newspaper 93
SHU CHEN & MORRIS WAYMAN (Canada)

Kinetics of Methane Production from Olive Mill Wastewater . . . 101
A. MARTÍN, R. BORJA, I. GARCÍA & J. A. FIESTAS (Spain)

Effective Oxygenation of Immobilized Cells Through Reduction in Bead Diameters: A Review 109
JAMES C. OGBONNA, MASATOSHI MATSUMURA & HIROSHI KATAOKA (Japan)

Patent Survey 123
News, Reviews and Events 125
Product and Service Finder 133

Number 3

A Comparison of Different Techniques for the Control of the Growth of *Candida utilis* CBS 621 135
MOHAMED GHOUL (Tunisia), JOSEPH BOUDRANT & JEAN MARC ENGASSER (France)

Osmotic (a_w) Effects on Growth and Ethanol Production of Free and Immobilized *Zymomonas mobilis* 143
J. J. LIN, M. C. DALE & M. R. OKOS (USA)

Saccharification of Wheat Straw for the Production of Alcohols . . 153
L. JIMÉNEZ & J. L. FERRER (Spain)

The Biochemistry of Cyclosporin Formation: A Review 157
ZDENĚK ŘEHÁČEK & ZHAO DE-XIU (Czechoslovakia)

Lactose Crystallization: Effects of Minerals and Seeding 167
MIKE Y. K. GUU & ROBERT R. ZALL (USA)

On-line Ethanol Estimation and Prediction: Application to the Production of Low Alcohol Wines 173
D. PICQUE, B. PERRET, Y. CLERAN & G. CORRIEU (France)

Yield Improvements in Carob Sugar Extraction 179
J. CARLOS ROSEIRO, FRANCISCO M. GÍRIO & M. T. AMARAL COLLAÇO (Portugal)

The Influence of Temperature and the Initial N:P Ratio on the Growth of Microalgae *Tetraselmis* sp. 183
E. MOLINA, E. MARTÍNEZ, S. SAÑCHEZ, F. GARCÍA & A. CONTRERAS (Spain)

Patent Survey 189
News, Reviews and Events 191
Product and Service Finder 199

Number 4

A Modular Computer-Controlled Fermentation Pilot-Plant . . . 201
O. DOBLHOFF-DIER, S. HUSS, R. LITOS, R. PLAIL, F. UNTERLUGGAUER, M. REITER & H. W. D. KATINGER (Austria)

Fed-Batch Culture for the Direct Conversion of Cellulosic Substrates to Acetic Acid/Ethanol by *Fusarium oxysporum* 209
P. K. R. KUMAR, AJAY SINGH & K. SCHÜGERL (FRG)

Production of Propionic Acid from Whey Ultrafiltrate by Immobilized Cells of *Propionibacterium shermanii* in Batch Process 217
D. K. JAIN, R. D. TYAGI, D. KLUEPFEL & T. J. AGBEBAVI (Canada)

Large-Scale Fermentation and Purification of a Recombinant Protein from *Escherichia coli* 225
LARS STRANDBERG, KRISTINA KÖHLER & SVEN-OLOF ENFORS (Sweden)

Efficient and Simple Extraction of Mouldy Bran in a Pulsed Column Extractor for Recovery of Amyloglucosidase in Concentrated Form . 235
N. P. GHILDYAL, M. RAMAKRISHNA, B. K. LONSANE & N. G. KARANTH (India)

Kinetic Study and Optimisation of the Production of Dihydroxyacetone from Glycerol using *Gluconobacter oxydans* 243
A. BORIES, C. CLARET & P. SOUCAILLE (France)

Patent Survey 249
News, Reviews and Events 250
Product and Service Finder 259

Number 5

The School of Chemical Engineering at the University of Birmingham . 261
A. J. BIDDLESTONE (UK)

Treatment of Dairy Farm Wastewaters in Engineered Reed Bed Systems 265
A. J. BIDDLESTONE, K. R. GRAY & G. D. JOB (UK)

A Robust Procedure for Trend and Model Estimation during Fermentation 269
P. I. HARDWICKE, C. A. KENT, J. P. NORTON & S. M. VERES (UK)

Aerobic Processing of Solid Organic Wastes for the Production of a Peat Alternative: A Review 275
A. J. BIDDLESTONE & K. R. GRAY (UK)

The Bulk Priming of Leek Seeds—The Influence of Oxygen-Enriched Air 281
W. BUJALSKI, A. W. NIENOW & G. M. PETCH (UK)

Some Comparisons of Cellulases from Two Different Strains of *Aspergillus fumigatus* 287
LESLEY A. HAMILTON & D. A. JOHN WASE (UK)

Influence of Iron-Bearing Natural Humic Compounds on the Physiology of *Escherichia coli* in Continuous Culture 293
HIRAN A. M. RATWATTE, THOMAS V. FOSTER, MICHAEL H. B. HAYES & D. A. JOHN WASE (UK)

Bakers' Yeast Cultivation on By-Products and Wastes of Potato and Wheat Starch Production on a Laboratory and Pilot-Plant Scale . . 301
M. LOTZ, R. FRÖHLICH, R. MATTHES, K. SCHÜGERL & M. SEEKAMP (FRG)

Patent Survey 313
News, Reviews and Events 315
Product and Service Finder 323

Number 6

Extracellular Protease and Amylase Activities in Ligninase-Producing Liquid Culture of *Phanerochaete chrysosporium* 325
S. DEY, T. K. MAITI, N. SAHA, R. BANERJEE & B. C. BHATTACHARYYA (India)

Alginate Beads Coated with Polyacrylamide Resin: Potential as a Biocatalyst 331
B. RUGGERI, G. SASSI, V. SPECCHIA, F. BOSCO & M. MARZONA (Italy)

Cross-flow Microfiltration of *Saccharomyces cerevisiae* 337
R. K. WARREN, D. G. MACDONALD & G. A. HILL (Canada)

The Temperature and pH Properties of the Extracellular Hemicellulose-Degrading Enzymes of *Aureobasidium pullulans* NRRL Y 2311–1 . . 343
JACOBUS MYBURGH, BERNARD A. PRIOR & STEPHANUS G. KILLIAN (South Africa)

A Comparison of Different Methods of β-Galactosidase Immobilization 349
A. BÓDALO, E. GÓMEZ, J. L. GÓMEZ, J. BASTIDA, M. F. MÁXIMO & F. DÍAZ (Spain)

Aspects of Fermenter Design for Solid-State Fermentations 355
ASHOK PANDEY (India)

Patent Survey 377
News, Reviews and Events 379
Product and Service Finder 387